WHAT IS CLAIMED IS:

1.   A method for reserving conference resources for a multipoint conference, comprising:

receiving a request for a multipoint conference
5   reservation;

receiving a list of participants;

predicting communication paths for a plurality of the participants;

estimating a multipoint control unit resource
10 requirement;

selecting a first multipoint control unit to host the multipoint conference;

determining availability of the multipoint control unit resource requirement at approximately a scheduled
15 start time and for a duration of the multipoint conference; and

selecting a second multipoint control unit to host the multipoint conference, if the first multipoint control unit does not have the multipoint control unit
20 resource requirement available at the scheduled start time.

2.   The method of Claim 1, wherein the multipoint control unit resource requirement comprises a digital
25 signal processor resource requirement.

3.   The method of Claim 1, wherein the multipoint control unit resource requirement comprises a communication port requirement.

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    4.   The method of Claim 1, further comprising reserving the multipoint conference resource requirement of the first multipoint control unit for the multipoint conference, if the multipoint conference resource

5 requirement is available.

    5.   The method of Claim 4, wherein the network resource requirements comprise gateway port requirements.

10   6.   The method of Claim 4, wherein the network resource requirements comprise digital signal processor requirements of a digital signal processor farm.

    7.   The method of Claim 1, further comprising
15 requesting an alternative estimated start time if the second multipoint control unit does not include the multipoint control unit resource requirement at approximately the scheduled start time.

8.   The method of Claim 1, further comprising:

estimating corresponding network resource requirements associated with a plurality of the communication paths;

5   selecting a first communication path of the plurality of communication paths;

determining the availability of the estimated network resource requirement associated with the first communication path; and

10   selecting a third multipoint control unit if the first communication path does not include the estimated network resource requirement at approximately the scheduled start time.

15   9.   The method of Claim 8, further comprising:

selecting a second communication path of the plurality of communication paths if the first communication path includes the estimated network resource requirement at approximately the scheduled start

20   time; and

selecting a fourth multipoint control unit if the second communication path does not include the estimated network resource requirement.

25   10. The method of Claim 9, further comprising determining the availability of the network resource requirements associated with each of the plurality of communication paths.

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11.   The   method   of   Claim   10,   further   comprising
selecting a fifth multipoint control unit if any of the
communication paths do not include the corresponding
network resource requirement.

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12.   The   method   of   Claim   1,   wherein   the
communication paths are predicted using RSVP   PATH
messages.

13. A method for reserving network resources for a multipoint conference, comprising:

receiving a request for a multipoint conference reservation;

5   receiving a list of participants;

selecting a first multipoint control unit to host the multipoint conference;

predicting communication paths associated with a plurality of the participants;

10   estimating corresponding network resource requirements associated with a plurality of the communication paths;

selecting a first communication path of the plurality of communication paths;

15   determining the availability of the estimated network resource requirement associated with the first communication path at approximately a scheduled start time and for an estimated duration of the multipoint conference reservation; and

20   selecting a second multipoint control unit to host the multipoint conference if the first communication path does not include the estimated network resource requirement at approximately the scheduled start time and for the estimated duration.

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14. The method of Claim 13, wherein the network resource requirements comprise bandwidth.

15. The method of Claim 13, wherein the network
30 resource requirements comprise gateway port requirements.

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16.   The method of Claim 13, wherein the network resource requirements comprise digital signal processor resource requirements of a digital signal processor farm.

17.   The method of Claim 13, further comprising reserving the network resource requirement associated with the first communication path for the multipoint conference, if the network resource requirement is available.

18.   The method of Claim 14, further comprising:

selecting a second communication path of the plurality of communication paths if the first communication path includes the estimated network resource requirement at approximately the scheduled start time; and

selecting a third multipoint control unit if the second communication path does not include the estimated network resource requirement.

19.   The method of Claim 14, further comprising determining the availability of the network resource requirements along each of the plurality of communication paths.

20.   The method of Claim 19, further comprising selecting a fourth multipoint control unit if any of the communication paths do not include the corresponding network resource requirement.

21. The method of Claim 14, wherein the communication paths are predicted using RSVP PATH messages.

22. The method of Claim 14, further comprising:
reserving a pool of bandwidth for high priority requests; and
allocating available bandwidth from the pool according to a predetermined priority scheme.

23. The method of Claim 22, wherein the predetermined priority scheme is established according to a type of multipoint conference requested.

24. The method of Claim 22, wherein the predetermined priority scheme is established according to an identity of a requestor of the multipoint conference.

25. The method of Claim 22, wherein the predetermined priority scheme is established according to a plurality of unique identifiers corresponding to a plurality of the participants, respectively; and
the available bandwidth is allocated to high priority participants until all high priority participant requests are processed.

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26. An apparatus for reserving conference resources for a multipoint conference, comprising:

a server operable to receive a request for a multipoint conference reservation and a list of

5   participants; and

the server being further operable to:

predict communication paths for a plurality of the participants;

estimate a digital signal processor resource

10   requirement for the multipoint conference;

select a first multipoint control unit to host the multipoint conference;

determine availability of the digital signal processor resource requirement at approximately a

15   scheduled start time and for an estimated duration of the multipoint conference; and

select a second multipoint control unit to host the multipoint conference, if the first multipoint control unit does not have the digital signal processor

20   resource requirement available at the scheduled start time and for the estimated duration.

27. The apparatus of Claim 26, wherein the server is further operable to reserve the digital signal

25   processor resource requirement from the first multipoint control unit for the multipoint conference, if the digital signal processor resource requirement is available.

28. The apparatus of Claim 26, wherein the server is further operable to:

estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

select a first communication path of the plurality of communication paths;

determine the availability of the estimated bandwidth requirement associated with the first communication path; and

select a third multipoint control unit if the first communication path does not include the associated bandwidth requirement at approximately the scheduled start time and for the estimated duration.

29. An apparatus for reserving network resources for a multipoint conference, comprising:

a server operable to receive a request for a multipoint conference reservation, and a list of
5 participants; and

the server being further operable to:

select a first multipoint control unit to host the multipoint conference;

predict communication paths associated with a
10 plurality of the participants;

estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

select a first communication path of the plurality of communication paths;

15 determine the availability of the estimated bandwidth requirement associated with the first communication path at approximately a scheduled start time and for an estimated duration of the multipoint conference reservation; and

20 select a second multipoint control unit to host the multipoint conference if the first communication path does not include the estimated bandwidth requirement at approximately the scheduled start time and for the estimated duration.

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30. The apparatus of Claim 29, further comprising:

memory operable to reserve the bandwidth requirement associated with the first communication path if the bandwidth requirement associated with the first
30 communication path is available.

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31. The apparatus of Claim 29, wherein the server is further operable to:

select a second communication path of the plurality of communication paths if the first communication path

5   includes   the   estimated   bandwidth   requirement   at approximately   the   scheduled   start   time   and   for   the estimated duration; and

select a third multipoint control unit if the second communication   path   does   not   include   the   estimated

10   bandwidth requirement.

32. The apparatus of Claim 29, wherein the server is further operable to:

reserve   a   pool   of   bandwidth   for   high   priority

15   multipoint conference requests; and

allocate available bandwidth from the pool according to a predetermined priority scheme.

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33. Logic encoded in media for reserving a network resource for a multipoint conference, the logic operable to perform the following steps:

receive a request for a multipoint conference

5   reservation;

receive a list of participants;

predict communication paths for a plurality of the participants;

estimate a digital signal processor resource

10   requirement for the multipoint conference;

select a first multipoint control unit to host the multipoint conference;

determine availability of the digital signal processor resource requirement at approximately a

15   scheduled start time and for an estimated duration of the multipoint conference; and

select a second multipoint control unit to host the multipoint conference, if the first multipoint control unit does not have the digital signal processor resource

20   requirement available at the scheduled start time and for the estimated duration.

34. The logic encoded in media of Claim 33, wherein the logic is further operable to reserve the digital

25   signal processor resource requirement from the first multipoint control unit for the multipoint conference, if the digital signal processor resource requirement is available.

35. The logic encoded in media of Claim 33, wherein the logic is further operable to:

estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

5   select a first communication path of the plurality of communication paths;

determine the availability of the estimated bandwidth requirement associated with the first communication path; and

10   select a third multipoint control unit if the first communication path does not include the associated bandwidth requirement at approximately the scheduled start time and for the estimated duration.

36. Logic encoded in media for reserving network resources for a multipoint conference, the logic operable to perform the following steps:

receive a request for a multipoint conference
5 reservation, and a list of participants;

select a first multipoint control unit to host the multipoint conference;

predict communication paths associated with a plurality of the participants;

10 estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

select the first communication path of the plurality of communication paths;

determine the availability of the estimated
15 bandwidth requirement associated with the first communication path at approximately a scheduled start time and for an estimated duration of the multipoint conference reservation; and

select a second multipoint control unit to host the
20 multipoint conference if the first communication path does not include the estimated bandwidth requirement at approximately the scheduled start time and for the estimated duration.

25 37. The logic encoded in media of Claim 36, wherein the logic is further operable to reserve the bandwidth requirement associated with the first communication path if the bandwidth requirement associated with the first communication path is available.

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38. The logic encoded in media of Claim 36, wherein the logic is further operable to:

select a second communication path of the plurality of communication paths if the first communication path

5   includes   the   estimated   bandwidth   requirement   at approximately the scheduled start time; and

select a third multipoint control unit if the second communication   path   does   not   include   the   estimated bandwidth requirement.

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39. The logic encoded in media of Claim 36, wherein the logic is further operable to:

reserve   a   pool   of   bandwidth   for   high   priority multipoint conference requests; and

15   allocate available bandwidth from the pool according to a predetermined priority scheme.

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40. An apparatus for reserving conference resources for a multipoint conference, comprising:

means for receiving a request for a multipoint conference reservation, and a list of participants;

5   means for predicting communication paths for a plurality of the participants;

means for estimating a digital signal processor resource requirement for the multipoint conference;

means for selecting a first multipoint control unit

10   to host the multipoint conference;

means for determining the availability of the digital signal processor resource requirement at approximately a scheduled start time and for an estimated duration of the multipoint conference; and

15   means for selecting a second multipoint control unit to host the multipoint conference if the first multipoint control unit does not have the digital signal processor resource requirement available at the scheduled start time and for the estimated duration.

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41. The apparatus of Claim 40, further comprising means for reserving the digital signal processor resource requirement from the first multipoint control unit for the multipoint conference, if the digital signal

25   processor resource requirement is available.

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42. The apparatus of claim 40, further comprising:

means for estimating corresponding bandwidth requirements associated with a plurality of the communication paths;

5   means for selecting a first communication path of the plurality of communication paths;

means for determining the availability of the estimated bandwidth requirements associated with the first communication path; and

10   means for selecting a third multipoint control unit if the first communication path does not include the associated bandwidth requirement at approximately the scheduled start time.

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43. An apparatus for reserving network resources for a multipoint conference, comprising:

means for receiving a request for a multipoint conference reservation, and a list of participants;

5   means for selecting a first multipoint control unit to host the multipoint conference;

means for predicting communication paths associated with a plurality of the participants;

means for estimating corresponding bandwidth
10   requirements associated with a plurality of the communication paths;

means for selecting a first communication path of the plurality of communication paths;

means for determining the availability of the
15   estimated bandwidth requirement associated with the first communication path; and

means for selecting a second multipoint control unit to host the multipoint conference if the first communication path does not include the estimated
20   bandwidth requirement at approximately the scheduled start time.

44. The apparatus of Claim 43, further comprising means for reserving the bandwidth requirement associated
25   with the first communication path if the bandwidth requirement associated with the first communication path is available.

45. The apparatus of Claim 43, further comprising:

means for selecting a second communication path of the plurality of communication paths if the first communication path includes the estimated bandwidth requirement at approximately the scheduled start time; and

means for selecting a third multipoint control unit if the second communication path does not include the estimated bandwidth requirement.